Relevant catheterization findings:
RCA#1:50%, #2:99% stenosis
[Interventional Management]
Procedural step:
Guiding Catheter: 8Fr. Britetip JCR 4.0 SH
We crossed the lesion by the TGV wire, and with the suction catheter, inserted the Optical coherence tomography (OCT) wire along the TGV wire through the lesion. OCT revealed the two-chamber view divided by the continuous diaphragm-like structure through the neointima before the narrowing. On intravascular ultrasound (IVUS), it was showing the black-hole phenomenon. Afterwards, we excised that structure by directional coronary atherectomy (DCA), then, expanded it by non-compliant balloon (φ3.75mm).
Case Summary:
A 78 year-old female who underwent Endeavor stent (3.0 x 30mm) placement at the proximal site of right coronary artery (RCA#1-2) due to effort angina had the two-time in-stent restenosis afterwards. The lesion was treated by cutting balloon in both times.

This time, we took her in for the follow-up CAG. CAG revealed the 99% stenosis in the stent (RCA#2).

The histological examination of the tissue excised by DCA revealed the neointimal view consisting of an extracellular matrix and myofibroblast. Also the tissue thought to be an extracellular matrix by HE staining showed a different staining characteristic, and indicated that it mainly consisted of proteoglycan.

TCTAP C-164

A Case Struggled to Salvage the Intravascular Ultrasound (IVUS) Catheter Entrapment at Stent Edge

Masashi Nakao
Tokyo Women's Medical University, Japan

[Clinical Information]
Patient initials or identifier number:
S.H
Relevant clinical history and physical exam:
A 69-year-old man presented with recurring effort chest pain.
Relevant test results prior to catheterization:
Stress myocardial perfusion cscintigraphy showed ischemia at RCA region.
Relevant catheterization findings:
Coronary arteriography showed severely calcified diffuse narrowing in his mid right coronary artery.
[Interventional Management]
Procedural step:
From trans-radial approach, a 6Fr AL2 guide-catheter was engaged. Following several pre-dilation using non-compliant balloon at high pressure, two 2.75mm Xience-V™ stents were overlapped. IVUS of Atlantis ™ Pro SR2 was advanced; however, its exit port was caught by the distal stent edge. Pushing and pulling could not free the IVUS catheter even after inserting a 014 inch coronary guide-wire after removing the imaging-core. We engaged another 6Fr JR4 guide-catheter from femoral approach, then advanced another guide-wire with stronger back-up force using anchoring technique to conus branch. Advancing a child catheter of Corsair™ to the site of entrapment also failed to slip off the IVUS catheter. We finally dilated the site by 1.0/2.5mm balloon at low pressure, and then successfully extracted the IVUS catheter by putting the deflated balloon along the stent to avoid longitudinal deformation.

TCTAP C-165

Saphenous Vein Graft Neoatherosclerosis in OCT

Balaji Pakshirajan, Ajit Mullasari
Madras Medical Mission, India

[Clinical Information]
Patient initials or identifier number:
Mr. AK
Relevant clinical history and physical exam:
58 yrs male
Diabetic and Hypertensive
CAD – S/P CABG X 3 grafts (LIMA – LAD, SVG – OM, PDA – 1995)
S/P PTCA with stent to native LCX (2008)
S/P PTCA with stent to SVG – RCA (27/03/2013)
Presented with Effort Angina Class II-III
O/E:
PR: 80/min.
BP: 110/80 mmHg.
CVS: S1, S2 (+).
RS: NVBS (+).
Relevant test results prior to catheterization:
ECG: NSR, HR – 71/min, QS in III, T inversion in I, II, aVL
ECHO: Mild LV dysfunction
Relevant catheterization findings:
Native coronary angiogram
LCA angio shows normal LMCA
LAD is type II vessel and had 90-90% stenosis in the proximal segment followed by total occlusion in the mid segment.
LCX is non-dominant and shows
Patent stent in the proximal segment. LCX and branches are free of disease
RCA is dominant and has total occlusion in the proximal segment.
Graft angiogram
Patent LIMA to LAD. LIMA and distal LAD are free of disease
SVG to OM is occluded
SVG to PDA has 90% stenosis in the mid segment followed by another 90% stenosis.
[Interventional Management]
Procedural step:
Procedure done under loval anaestheisa through right femoral approach. SVG-PDA was engaged and lesions in the mid segment were crossed. Predilatations were done using a 2x10mm sprinter upto 10 atm for 15 sec. Cutting balloon angioplasty ws done using 2.75x10mm flextom upto 6 atm for 15 sec. Stent deployment was done to the distal lesion using 3.5x28mm xience V at 12 atm for 15 sec and the proximal lesion was stented using 3.5x28mm xience V at 16 atm for 15 sec. Post stent dilatations were done with 3.5x12mm NC trek upto 24 atm for 15 sec. Final angiogram showed no residual stenosis with good antegrade flow. The procedure was uneventful. Patient shifted with stable hemodynamics.
Case Summary:
Pre procedure OCT showed Neoathresclerosis of SVG instent restenosis
Post procedure OCT showed well apposed and overlapped stent

TCTAP C-166

Preventive Angioplasty in LAD During Primary PCI Where the Culprit Vessel Is the RCA

Habibur Rahman
National Heart Foundation Hospital & Research Institute, Bangladesh

[Clinical Information]
Patient initials or identifier number:
A 28 years old male
Relevant clinical history and physical exam:
Central chest pain for 3 hours, HR: 110/min, BP: 90/70 mmHg, clear lung bases
Relevant test results prior to catheterization:
ECG: Acute Inf. MI, LVEF: 50%, raised serum markers
Relevant catheterization findings:
LAD: Spiral dissection and loaded with thrombus starting at the ostium
RCA: Totally occluded
[Interventional Management]
Procedural step:
Trans Femoral approach
7 Fr. vascular access sheath used
Left JL 3.5 catheter for diagnostic angiography for the left side
Culprit vessel (RCA) was engaged with AL 1 guide catheter
Runthrough Floppy wire crossed
Thrombus aspiration done by aspiration catheter
Intra-coronary vasodilators given
A 4.0/24 DES deployed with TIMI III flow
Left side engaged with EBU guide catheter
Runthrough Floppy wire attempted but failed to cross
Hi-torque floppy wire taken
Thrombus aspirated
3.5 mm x 26 mm Resolute Integrity Distal Left main to LAD
IVUS revealed mal-apposed stent and post dilated with higher NC balloon